

International Business Forms Industries, Inc.

PERSPECTIVE

83

This is the 1983 edition of an annual publication prepared at the direction of the IBFI Economic Research Committee for the benefit of the industry and its customers. Each edition contains a detailed review of the previous year's results and a five-year demand forecast. In addition, the results of any new research undertaken by the staff during the preceding twelve months are presented in these pages.

The author is responsible for all of the estimates and opinions in this volume. All charts and graphs are the work of the author. Every effort has been made to ensure accuracy but it of course cannot be guaranteed.

Norman McLeod

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PERSPECTIVE 1983

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Executive Summary

1982 Results: From the viewpoint of both sales and profits, 1982 proved to be one of the more disappointing years in the history of the U.S. forms industry. There was still some real growth, but it was overwhelmed by the net-productive-capacity increases of recent years.

1982 SALES VERSUS 1981 *in millions of current dollars at factory shipment values*

Product	1981	1982	Dollar Change	Percent Change
Continuous Custom	1,823.7	1,886.0	+62.3	+3.4%
Continuous Stock	1,186.5	1,229.3	+42.8	+3.6%
Unit Sets	1,417.2	1,390.3	-26.9	-1.9%
Salesbooks, Pegboard	175.7	184.0	+8.3	+4.7%
TOTAL	4,603.1	4,689.6	+86.5	+1.9%

Real Growth: For the first time in some seven years, the data above represent real growth as well as current-dollar information. In fact, there were small year-over-year declines in prices of unit sets and stock continuous forms. The magnitude of these declines varied extremely widely from one company to another.

Profits: Profits were down by some 20% over 1981 - itself hardly a sterling year as these things go. The industry was helped here by a price war in the paper industry and stabilization in the prices of other raw material inputs. Rising hourly wages were offset by lay-offs.

1983 and Beyond: It is expected that the recovery will build slowly, and as a result will be more sustained than recoveries of recent memory. Of course, this prognosis also indicates that 1983 will not be as strong a year as many have hoped and even predicted. Continuous forms will continue to benefit from computerization. *However, it is IBFI's view that desktop machines will have little impact on the forms market.* Also, value-added content will carry on falling as trends toward fewer parts, more stock forms and smaller sizes continue.

IBFI FORECAST: U.S. BUSINESS FORMS 1983 - 1986 *in millions of 1982 dollars, shipment values*

Product	1983	1984	1985	1986
Custom Continuous	1,990	2,135	2,308	2,411
Stock Continuous	1,273	1,405	1,534	1,643
Unit Sets	1,413	1,490	1,551	1,585
Salesbooks, Pegboard	190	200	205	205
TOTAL	4,866	5,230	5,598	5,844

1982 IN REVIEW

In terms of orders and shipments, 1982 started out in a fairly encouraging manner. First-quarter results, though down somewhat in comparison to the very strong fourth quarter of 1981, were a significant improvement over the previous year's first quarter. The first six to eight weeks in particular contained plenty of cause for optimism about the coming year.

However, by the time the industry was entering the second quarter, the wind was leaving its sails. In retrospect, much of the year's early activity was due to expectations on the part of many forms end-users that an economic recovery would be under way by mid-1982 at the latest. As the economic engine failed more and more signally to accelerate, forms orders began dropping off. In terms of year-earlier performance, the second quarter of 1982 must have been particularly discouraging, since for many forms manufacturers this quarter has traditionally been their seasonally strongest period.

Again using hindsight, the second quarter's unusual weakness was due in part to some working down of inventories by end-users, in part to a general economic deterioration, and last but not least to the beginning of heavy price competition among forms manufacturers. In any event, the third quarter of the year was no better, and while the fourth quarter showed a little improvement, it was a spark rather than a flame. Discounting and price competition carried on unabated, with the all too logical result that profit levels were affected even more heavily than sales.

1982 SALES BY QUARTER AND PRODUCT

in millions of current dollars
at shipment values

	I	II	III	IV	TOTAL
Continuous Custom	494.1	457.1	451.0	483.8	1,886.0
Continuous Stock	322.1	308.7	283.2	315.3	1,229.3
Unit Sets	325.1	348.6	355.0	361.6	1,390.3
Salesbooks, Pegboard	52.6	39.4	46.0	46.0	184.0
TOTAL	1,193.9	1,153.8	1,135.2	1,206.7	4,689.6

All in all, the year was the toughest the industry has had since 1975. Disappointment was sharpened by the stark contrast between 1982's tough realities on the one hand as compared to the broadly held expectations of an economic recovery and a firming forms market on the other hand.

1982 SALES BY PRODUCT VERSUS 1981
in millions of current dollars
at shipment values

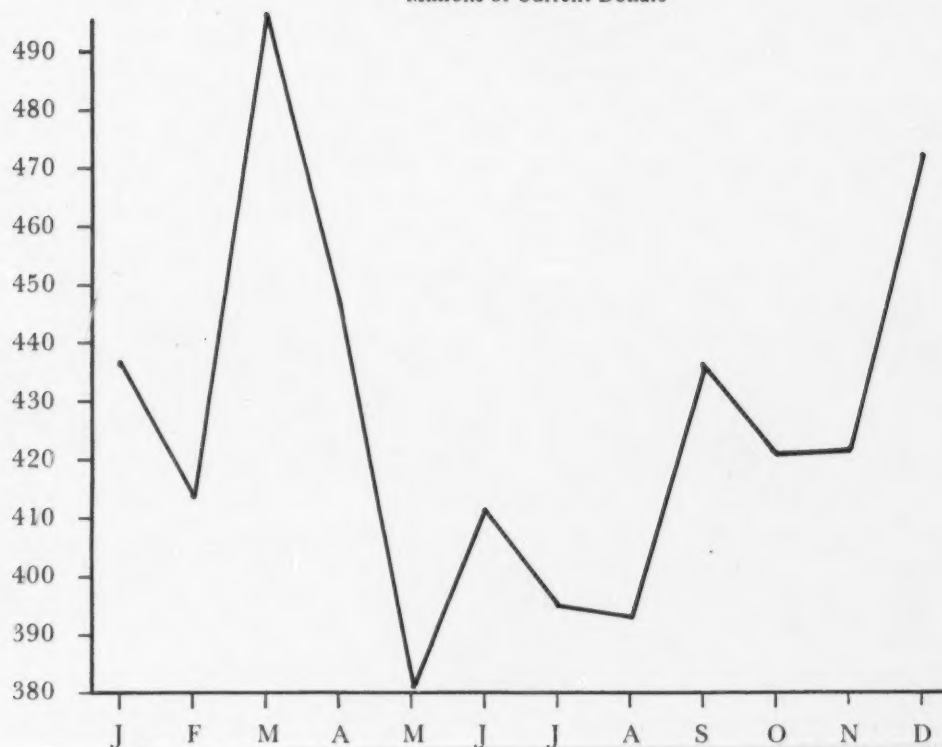
Product	1981	1982	Dollar Change	Percent Change
Continuous Custom	1,823.7	1,886.0	+62.3	+3.4%
Continuous Stock	1,186.5	1,229.3	+42.8	+3.6%
Unit Sets	1,417.2	1,390.3	--26.9	--1.9%
Salesbooks, Pegboard	175.7	184.0	+8.3	+4.7%
TOTAL	4,603.1	4,689.6	+86.5	+1.9%

1982 SALES BY QUARTER VERSUS 1981
in millions of current dollars
at shipment values

Quarter	1981	1982	Dollar Change	Percent Change
I	1,079.8	1,193.9	+114.1	+10.6%
II	1,204.5	1,153.8	--50.7	--4.2%
III	1,145.2	1,135.2	--10.0	--0.9%
IV	1,173.6	1,206.7	+33.1	+2.8%
TOTAL	4,603.1	4,689.6	+86.5	+1.9%

MONTHLY FORMS SALES

All Firms, Retail Values
Millions of Current Dollars

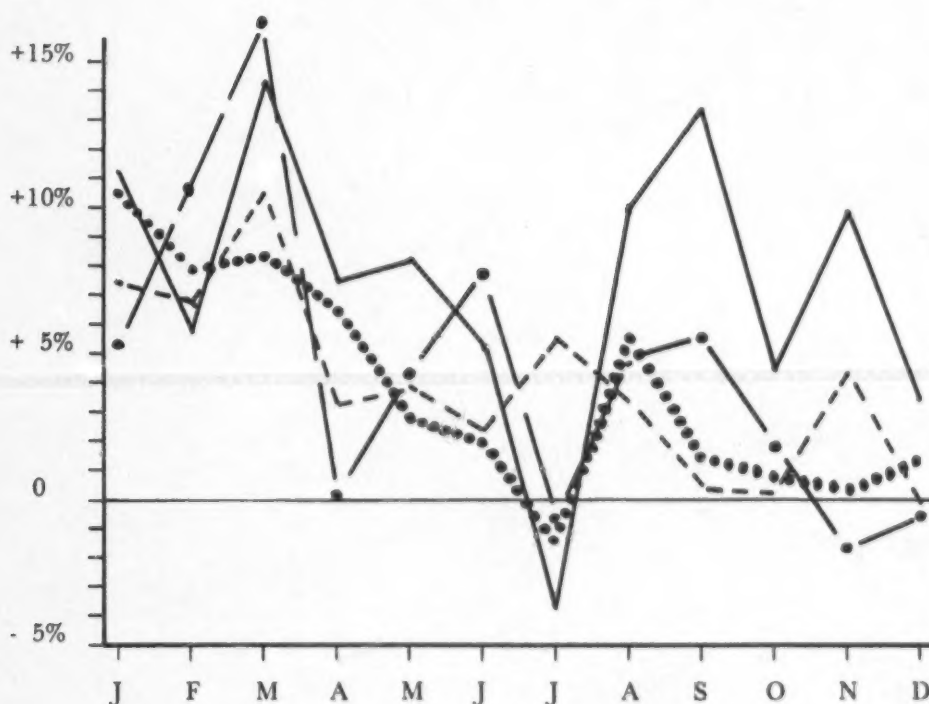


Source: IBFI Confidential Monthly Sales Index

The year was also characterized by erratic movements in industry-wide sales, as the graph above indicates. These swings made planning very difficult; in the words of one analyst, those who had to interpret sales data and attempt to shape the numbers into meaningful trends "had to eat a lot of broken glass" in 1982.

Of course, there were winners as well as losers. Across the spectrum of American industry, 20% of all industrial concerns registered net increases in employment in 1982 over 1981. The same can be said for about a tenth of all forms companies. However, in an environment of declining total employment, good news for some companies could only be bad news for others. It is not the purpose of this publication to discuss individual firms; however, even a casual look at sales results by company size reveals significant deviations from the mean.

1982 SALES RESULTS BY COMPANY SIZE Percent Change Over Same Month in 1981



Source: IBFI Confidential Monthly Sales Index

KEY:

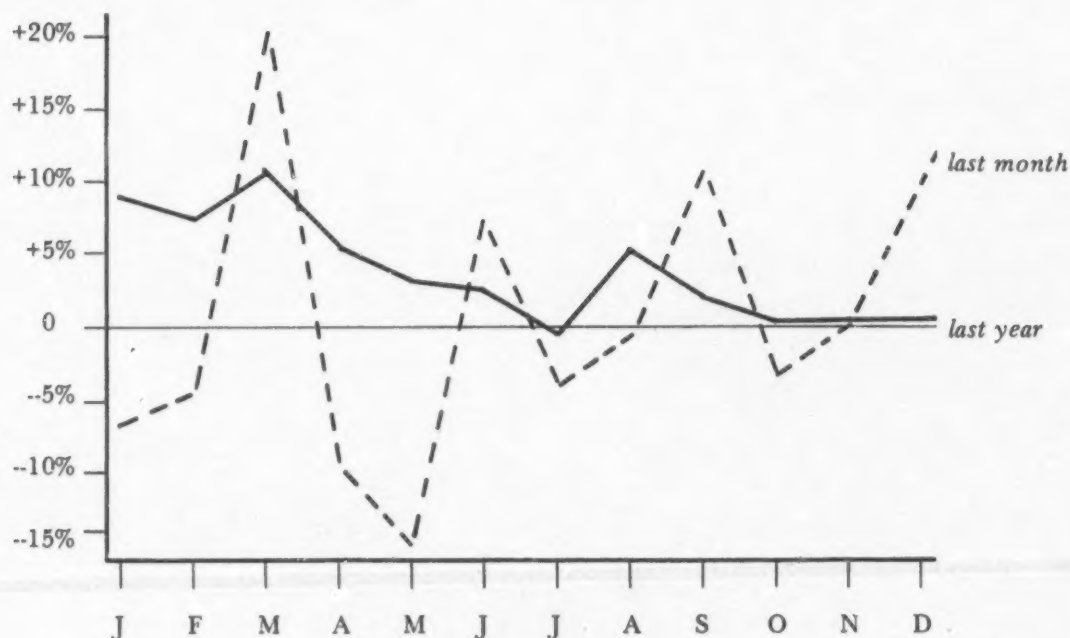
- \$0-3 million per year ———
- \$3-8 million per year - - - - -
- \$8-15 million per year • — •
- Over \$15 million per year •••••

1982 FORMS SALES BY COMPANY SIZE
all dollar amounts are millions of current dollars

Annual Forms Sales	Number of Companies	Total Forms Sales		Dollar Increase	Percent Increase
		1981	1982		
50+	18	3,111.9	3,132.4	20.5	0.7%
20 - 50	18	483.1	500.5	17.4	3.6%
10 - 20	16	239.9	247.1	7.2	3.0%
3 - 10	88	456.7	475.0	18.3	4.0%
0 - 3	470	311.5	334.6	23.1	7.4
TOTAL	610	4,603.1	4,689.6	86.5	1.9%

This table shows that the largest companies as a group were affected more heavily by economic trends than was the rest of the industry. Such a conclusion should not be surprising. These companies have, on average, much larger accounts and national sales coverage; they are, in short, large corporations doing business primarily with other large business entities. As such, it is all but inevitable that the larger companies' results will more directly track economic conditions. Additionally, due both to the breadth of their ongoing sales efforts and the inertia inherent in any large mass, the larger companies lack many of the opportunities available to a small or even medium-sized company to improve its results through internal cost-cutting or through external sales efforts; such attempts by the larger companies simply lead to mutual bloodletting.

1982 MONTHLY RETAIL FORMS SALES, ALL FIRMS
 Percentage Change Over Same Month Last Year
 Percentage Change Over Previous Month



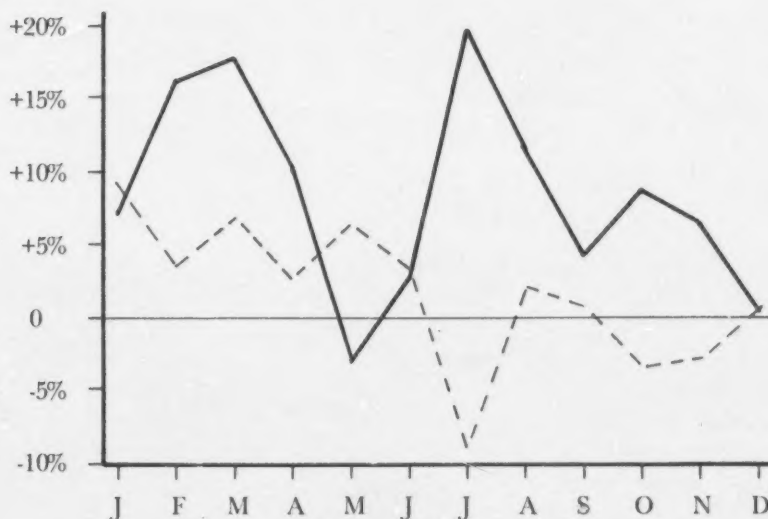
By showing "all firms", this graph should help put the previous breakdowns of monthly movements in forms sales into proper perspective. In particular it shows a steady year-over-year slide (flattening only in the fourth quarter) laid over a very volatile pattern of month-to-month change.

Distribution channels were an important determinant of individual company results in 1982. In the first place, one of the top achievers in the tough 1982 marketplace owed much of its success to an unorthodox distribution system. New England Business Services reported that it processed over two million orders at an average sales value of \$44 per order. The resulting total sales volume of \$92 millions represented a sixteen percent increase over 1981, and while this raw sales increase is impressive enough given the toughness of the 1982 forms marketplace, the operating profit compared even more favorably with industry averages. Obviously, the combination of catalogue marketing and exceptionally low average order sizes enabled NEBS to avoid most of the heavy price pressures that had such negative effects on overall industry results. It is, therefore, little wonder that other companies of all shapes and sizes are making haste to open up "non-traditional" marketing and distribution channels of their own. These channels already include telephone marketing, wholesale shipments to retail outlets such as office supply stores and computer shops, and direct advertising (such as radio spots) in addition to the direct mail approach pioneered by NEBS.

In the second place, there were some fairly sharp differences in the results achieved by firms using the two "traditional" channels, namely direct sales through dedicated sales forces and indirect sales through independent distributors and brokers. In 1982, indirect-selling firms manufacturers enjoyed sharply better sales results as a group than did direct-sellers, with indirect sales up 8½% against only 1.7% for the direct-selling group.

1982 SALES RESULTS BY DISTRIBUTION CHANNEL

percent change over same month in 1981



KEY: Direct Sellers - - - Indirect Sellers —

1982 SALES RESULTS
Direct versus Indirect Sales by Product
Retail versus Shipment Values

all dollar amounts in millions of current dollars

Product:	Direct Sales, Shipment Value	Shipment Value	Indirect Sales Markup	Retail Value	Total Retail Value
Custom Continuous	1,392.0	494.0	148.2	642.2	2,034.2
Stock Continuous	1,003.0	226.3	33.9	260.2	1,263.2
Unit Sets	962.5	427.8	171.1	598.9	1,561.4
Salesbooks, Pegboard	72.6	111.4	48.6	160.0	232.6
TOTAL	3,430.1	1,259.5	401.8	1,661.3	5,091.4

Product:	At Shipment Values		At Retail Values	
	Direct +	Indirect = 100%	Direct +	Indirect = 100%
Continuous Custom	73.8	26.2	68.4	31.6
Continuous Stock	81.6	18.4	79.4	20.6
Unit Sets	69.2	30.8	61.6	38.4
Salesbooks, Pegboard	39.5	60.5	31.2	68.8
TOTAL	73.1	26.9	67.4	32.6

The reason for the superior performance of the indirect-selling companies is partly that such companies enjoy measurable and significant cost advantages due to lower overheads. These companies must sell primarily on price (not to say that quality and service are of no consequence) since they are gaining a cost advantage in return for surrendering most control over the specific type of customer they might wish to serve. In a market as competitive and price-conscious as was the 1982 forms marketplace, it was all but inevitable that such companies would gain some market share. The game was being played, so to speak, on their home field.

1982 OPERATING RATIOS

Total Sales = 100.0

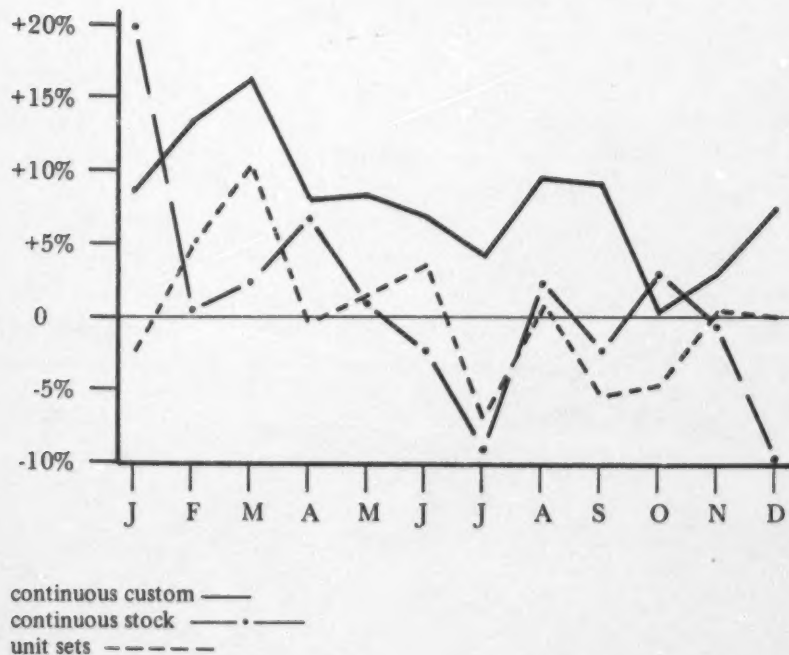
	Directs	Indirects
Materials	50.1	51.0
Factory Payroll	16.9	19.7
Factory Expense	8.6	9.8
Administration	6.0	6.6
Sales Expense	12.8	6.1
Operating Income	5.6	6.8
Return on Investment	7.6	9.4

Another factor helped indirect-selling companies in 1982. They are typically smaller companies selling smaller orders to smaller end-users. This accident of nature found them in a market segment that is somewhat less cyclical in behavior than the forms market as a whole. The effect this placement had can be easily proven, though not scientifically quantified, by comparing the results of the indirects as a group with those of their largest member, Ennis Business Forms. Despite excellent management talent and imaginative cost-reduction programs, Ennis' 1982 results were disappointing compared to its smaller competitors, with a decline in sales of 2.1% according to published reports. The monthly sales results presented at the beginning of this section provide further proof that the larger, less flexible companies with their published price lists and higher overheads were in many cases a tempting target for smaller companies; remember, in reviewing this data, that nearly all the smallest companies sold their product through distributors and brokers while nearly all the largest companies sold direct.

We have already seen that there is a strong relationship between product mix and channels of distribution (see table above, "Direct versus Indirect Sales by Product"). The reason, of course, is a simple one: the higher the value added content, the more room there is for the middleman's markup, and thus the greater the likelihood that the product will be sold through distributors and brokers. Indirect sales enjoy their greatest share of market in the salesbook and pegboard product category; the value-added content of these products can be as high as 80%. By comparison, with a value-added content of 35% and under, four-fifths of all stock continuous forms are sold direct. Custom continuous and unit set forms lie inbetween these extremes, though unit sets, with a marginally greater value-added content, predictably show a higher market share for indirect sales.

In terms of overall sales results, product mix also affected forms markets. As the graph below pictorially illustrates, unit sets suffered the most from economic conditions, while stock continuous forms experienced more demand slowdown than did custom continuous forms. Nonetheless, these differentials are small compared with previous recession years. In fact, the industry's major product groups behaved in a more similar fashion than is typical in good years or bad. Possible explanations include the fact that interest rates are keeping end-user inventories lean in all areas, and the smaller, more frequent orders that are being generated both by inventory-control management and the ongoing spread of computers to a wider and wider segment of American business.

1982 SALES RESULTS
By Major Product
 percent change over same month in 1981



Real Growth

Estimating "real", or unit, growth as opposed to nominal dollar growth in the forms industry is at best an art rather than a science. After all, the industry has never even come to any agreement on how real growth should be measured, with tonnages of raw materials converted, numbers of impressions, pages of forms, and deflation of nominal-dollar sales all candidates for unit measurement. With changing average paper basis weights (*for a fuller discussion of this trend see Perspective 1982*), fluctuating average forms sizes, and ever-present but never-constant differentials between list and actual prices, real growth data in this industry will never be precise.

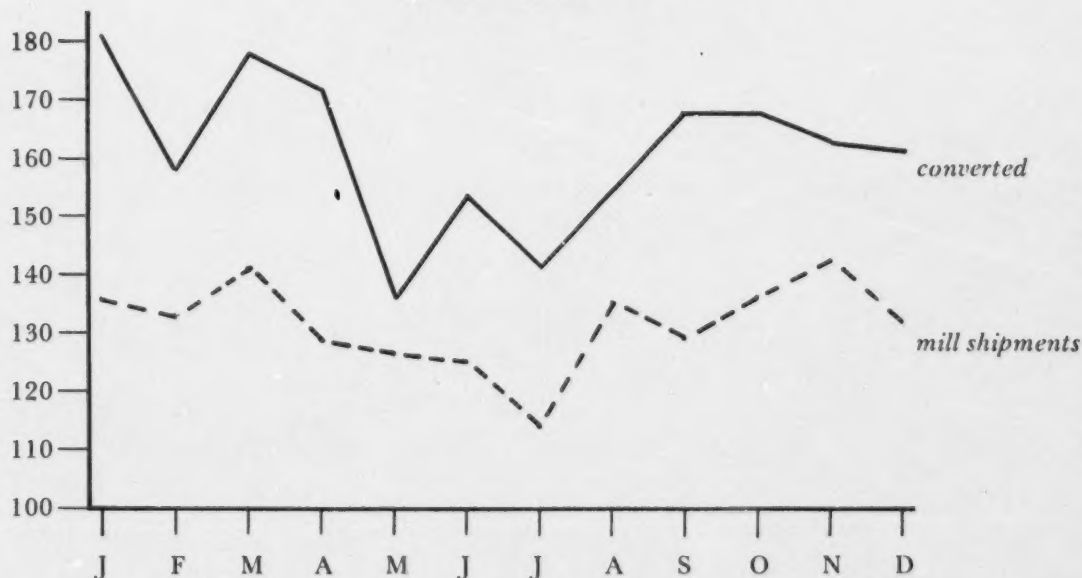
Presenting such an estimate for 1982 is fraught with even more difficulty than usual. List prices were virtually meaningless, both for forms and for the industry's raw materials. Paper mill shipment data were also of little use. While over any three-year period mill shipments are an excellent guide to real growth in the forms industry as measured by tons of paper converted, the past eighteen months have seen significant swings in inventories. Many forms manufacturers entered 1982 with what turned out to be excess inventory, purchased at the end of 1981 first of all in anticipation of an improvement in the forms market and secondly in an attempt to take the sting out of what had become the traditional first-quarter increases in the price of paper. Thus the mill shipment data from the American Paper Institute overstated apparent real growth in the industry in 1981 and understated it in 1982. This inventory situation was, of course, also a significant though not the only factor in the dramatic declines in paper prices.

IBFI's tonnage index, however, has proved a fairly reliable indicator for real-growth trends in 1982. Additional input came from a year-end survey of a selected sample of the membership, as well as other industry analysts. Nonetheless, the best estimates of price movements in 1982 remain just that — estimates, and, arguably, crude ones at that. In place of the elaborate charts and graphs separating real growth from price inflation that have filled pages of *Perspective* for the last few years, a brief discussion will serve just as well for 1982.

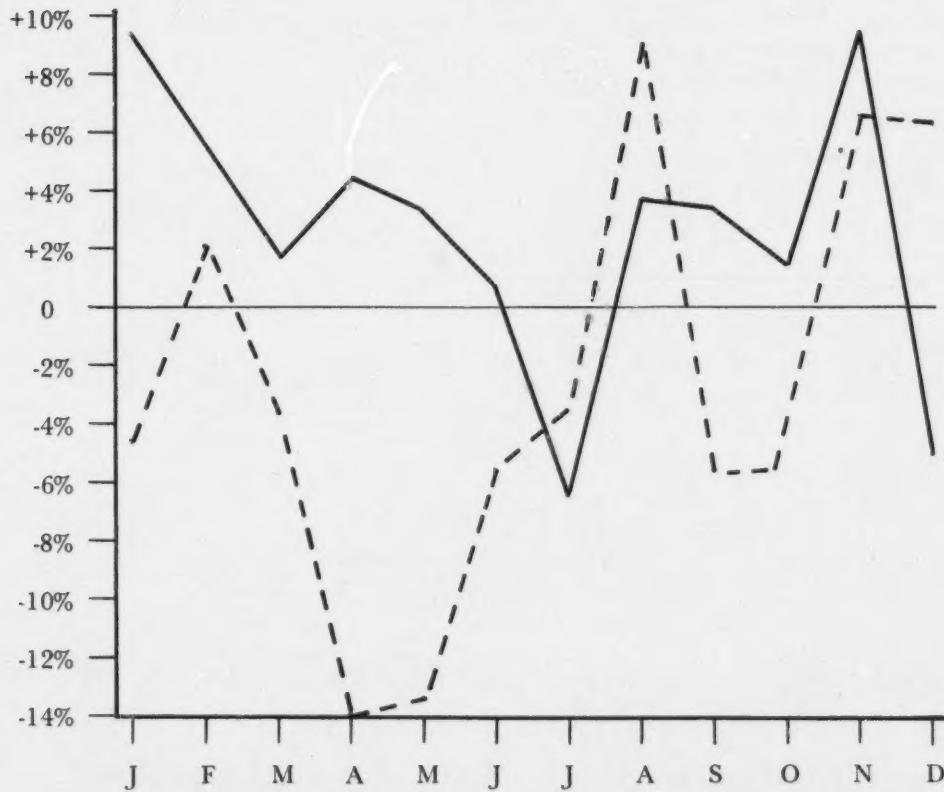
Most forms manufacturers increased prices at or near the beginning of 1982 by 5-7%, partly in anticipation of a firmer market and partly, if the truth be known, out of habit. By the beginning of March it was becoming clear that these prices were not being accepted in the marketplace, with well-publicized declines in raw materials costs adding to the pressures of under-capacity. By the middle of the year prices were back to their January levels, and continued to come down; by year-end prices for many products were 3-5% below year-ago levels.

The end result is that prices for the year as a whole were very nearly flat. Some analysts and executives estimate that real growth was actually a bit *greater* than nominal-dollar growth. So for 1982 the sales-dollar growth rates presented at the beginning of this publication are the actual growth rates as well. It is worth noting, however, that the bulk of what real growth there was occurred in the first and fourth quarters. Also, no discussion of price movements in the industry in 1982 would be complete without mention of the extreme price competition that pervaded the market for stock forms, or the depth of the discounting engaged in by the largest companies, with figures like 20% causing hardly a flicker of the eyelids. One result of this discounting was that *real* growth among the various size categories of forms manufacturers was much more similar than was *nominal* growth.

PAPER TONNAGE INDEX
 Paper Mill Shipments (source: API)
 Tonnage Converted by Forms Manufacturers (source: IBFI)
 1974 = 100



1982 PAPER TONNAGE MOVEMENTS
 percent change over same month in 1981



Tons of materials converted by forms manufacturers (*source: IBFI*)
 Tons of forms bond shipped to forms manufacturers (*source: API*)

This graph shows even more clearly than the preceding one the volatility of the 1982 market.

Capacity

Of course, the main culprit in the heavy price competition was overcapacity. Always a problem, it was an especially tough one in 1982. Although equipment manufacturers as a group saw a dramatic fall-off in orders as well as a fair number of cancellations, previously ordered equipment continued to be delivered, and net capacity in place rose 1.6% from December 31, 1981 to December 31, 1982. Perhaps the best that can be said is that in 1982 our industry's capacity problem had many bedfellows from other parts of the economy.

1982 NET CAPACITY CHANGES

Source: IBFI Quarterly Business Conditions Survey

Quarter	Annualized Change
I	+2.0 %
II	-(0.2) %
III	+1.6 %
IV	+2.8 %
Year	+1.6 %

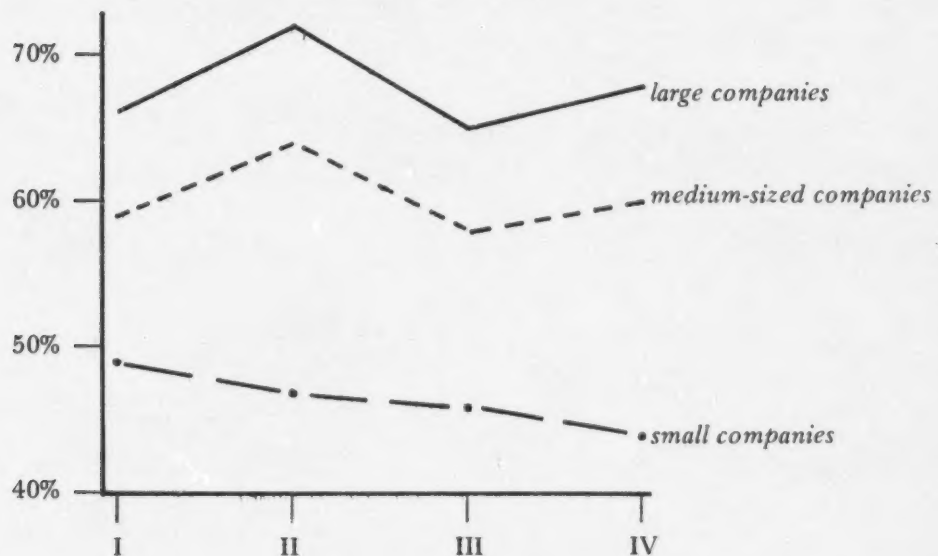
Some of these deliveries were no doubt the result of careful planning based on the generally held assumption that an economic upturn would be discernible by the third quarter at the latest. The only consolation that can be offered to these unfortunates is that there were many of us for whom 1982 did not turn out "as planned"! Others of these deliveries were, of course, made to the elite group of forms companies that continued to expand, to companies modernizing their equipment base, and to companies aggressively pursuing increased sales, come what may.

In that last category — those who avoided participation in the recession — the business forms division of Willamette Industries must be singled out. Willamette's low-key but determined expansion in the stock continuous market is already well known to other companies competing in that market. From a virtual start-up operation 10 years ago, this company has annually expanded its forms sales and capacity in each successive year. According to publicly available information recently analyzed by Morgan Stanley's investment research department, Willamette's forms sales have increased at an annually compounded rate of 26.7% since 1976. In 1982, this report states, "... volume of the business forms operation grew 22% for the nine months [ending September 30]" with "substantial expansion in capacity" including "a 100,000-ton [per year] white paper machine" whose "output is integrated into the Company's rapidly expanding business forms operations." Clearly, such enviable results, impressive enough in any market environment, were achieved in 1982 only at the expense of other manufacturers. As such, Willamette's expansion is the best example of what is meant by saying that high *individual* operating rates can be one cause of low *industry* operating rates.

Whatever the causes, capacity utilization fell during 1982 to its lowest levels since 1975.

1982 CAPACITY UTILIZATION BY QUARTER

100% = 120 Hours per Week



In assessing capacity utilization data, it is important to remember that the actual level of demand for forms is only half of the equation. The other half is, of course, net additions of presses and collators. Thus capacity utilization can improve in years of mediocre final demand, as indeed it did in 1976; by the same token, it can fall in years of outstanding final demand, as in late 1979. The key is not absolutes but relatives, and in this context the evidence suggests that our industry is captained by eternal optimists. Years in which net capacity additions have been outstripped by growth in final forms demand are only slightly more common than years of a balanced federal budget.

To be fair, the comparative crudeness of the available measurement tools can make a poor situation look even worse. Neither all presses nor all companies are the same and effective capacity utilization can vary substantially by product and by company size (though *not* by distribution channel). Though the matter defies precise quantification, it is reliably estimated that present stock forms production equipment could supply new demand for the next 18-24 months. Potential production of simple unit sets on equipment presently in place would be awesome at 100% utilization (fortunately, the effective capacity operating rate for the typical unit set produces is much lower). Shorter-run continuous custom capacity is much more nearly in line with demand, as is capacity for pegboard systems.

As for differences from company to company, the key point here is that every company has its own theoretical 100% point. If one sets 100% equal to the company's own press-hour goals instead of to the statistically standardized 3-shift/5-day 120-hour production week, quite a different picture can emerge.

Such an exercise has its most visible effects on the smallest and the largest companies. The former will rarely attempt to operate more than two 40-hour weekly shifts, while the latter can certainly hope to achieve 120-hour weeks in a strong market.

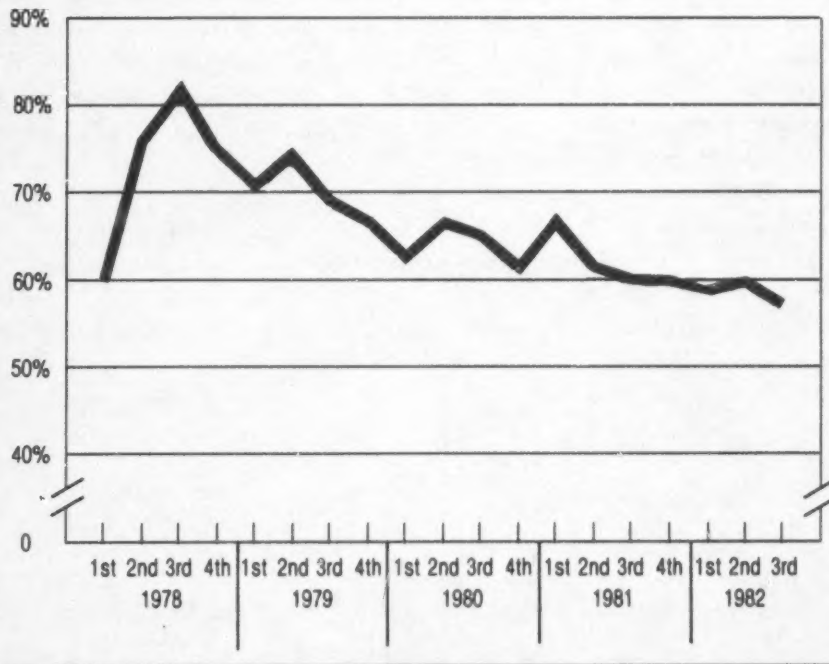
ACTUAL VERSUS NOMINAL CAPACITY RATES

	Nominal 100% Capacity Utilization (Hrs./Wk.)	Actual 100% Utilization	1982 Average Nominal Capacity Utilization (Hrs./Wk.)	Actual Utilization
Company Size:				
Small	120	80	46.5%	70.0%
Medium	120	100	60.5%	72.6%
Large	120	120	68.0%	68.0%

Quarterly Capacity Utilization

At Standard Capacity

100% = 120 Hours/Week



This graph gives a longer-term picture of capacity utilization. It clearly shows how pervasive this problem has been in recent years - and how, due to continuing net additions of equipment, capacity utilization has deteriorated in good years as well as bad.

Profitability in 1982

The level of profits in the forms industry has three main determinants - prices, productivity, and costs. Prices are set by the marketplace, and as such are a function of end-user demand for forms, capacity utilization levels, and the degree of cost inflation. The price environment in 1982 has already been discussed, and was a very tough one indeed. It was, for the reasons that have already been laid out, an obvious negative influence on profitability. Productivity showed mixed results. Production scheduling and inventory control suffered from shorter backlogs and less controllable product mixes. However, layoffs of some 1,000 production workers as well as 500 sales and administrative employees - representing some 3% of total industry employment - redressed the balance during the second half of the year.

So, although heavy competition forced prices down and reduced margins, productivity improvement in the second half of the year helped keep profits from plummeting. Costs also present a mixed picture. Hourly wages continued to rise, from a national average of \$8.68 for all employees in January to \$9.14 in December, according to the Bureau of Labor Statistics. In an atmosphere of declining industry employment the net effect was a stable industry wage bill.

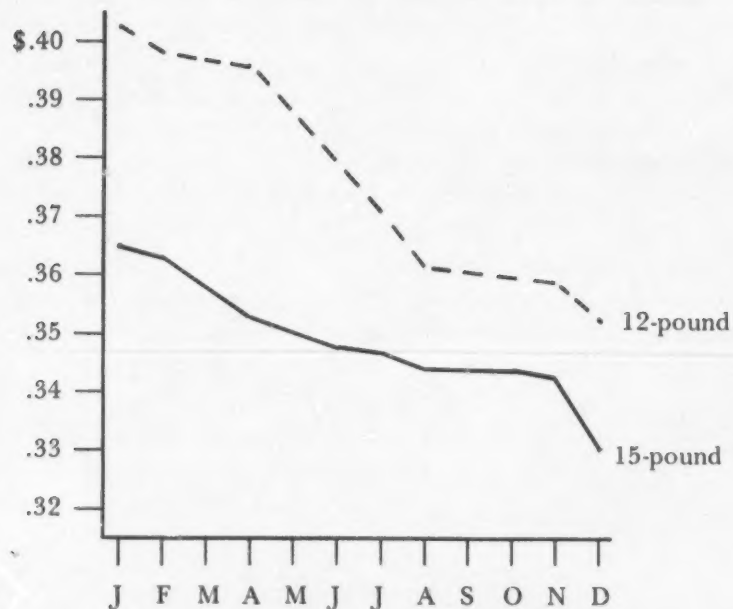
1982 WAGE BILL in millions of current dollars

Quarter	Wages
I	\$214
II	\$219
III	\$206
IV	\$229
TOTAL	\$868

In most other areas, 1982 was a year of relief from cost increases instead of actual declines. The two standouts were interest rates and forms bond. Dramatic declines in interest rates over the year sharply reduced interest expense for firms with substantial outstanding debts. Of course, forms manufacturers without debt saw their interest income decline.

Reductions in forms bond prices were also a mixed blessing, though less obviously so. A number of firms considered falling paper prices to be the main force behind 1982's heavy price competition. This contention, however, is a very arguable one. Though high-volume forms purchasers certainly kept a close eye on paper costs as a guide to movements in forms prices, it seems more than likely that price-cutting would have developed with or without paper price reductions. What is not arguable is that the industry would have paid out significantly more for paper under more normal market conditions. Whether or not these dollars could have been passed on to end-users of forms is a question that the industry should be happy to leave unanswered.

FORMS BOND PRICES
mill price, cents per pound



SOURCES: IBFI Quarterly Business Conditions Survey; U.S. Bureau of Labor price indices.

ESTIMATED PAPER COST SAVINGS

Sources: IBFI Monthly and Quarterly Surveys, API Mill Shipments Index

Quarter	Average Price, Dollars per Hundredweight			Total Paper Cost Millions of Current Dollars		
	Actual	No Decline	Modest Increase	Actual	No Decline	Modest Increase
I	\$37	\$37	\$37	\$291	\$291	\$291
II	\$36	\$37	\$38	\$273	\$280	\$288
III	\$35	\$37	\$38	\$261	\$276	\$283
IV	\$33	\$37	\$39	\$261	\$293	\$308
TOTAL	N/A	N/A	N/A	\$1,086	\$1,140	\$1,170

These estimates represent, then, savings to the forms industry of some \$54 millions, or 5%, over the year as a whole compared with an environment of stable paper prices. Of course, the savings loom even larger if compared with the 5-7½% annual paper price rises that had in recent years come to be viewed as "normal".

Another source of raw material cost savings was the ability to keep less inventory on hand. The available data do not permit accurate quantification of the resulting savings. However, IBFI's *Quarterly Business Conditions Survey* certainly proves that with delivery times at their lowest in years, forms manufacturers significantly reduced their production days of inventory of paper and other materials. In this report, just under 25% of all participating firms indicated a significant decline in inventory levels relative to production.

The net effect of all these forces was, not surprisingly, a decline in overall profitability as a percentage of sales and corresponding declines in return on investment. The decline was not, however, as sharp as many had feared. The summary data presented below show a percentage decline in profitability of some 20%. It is noteworthy, though, that many of the larger firms in the industry, especially the publicly owned ones, achieved this almost stable profitability at the cost of some market share. Whether those accounts will return after the recession remains to be seen.

1982 OPERATING INCOME BY QUARTER

measured as a percentage of total sales

Category:	Quarter:			
	I	II	III	IV
All	6.4	4.2	4.0	5.4
\$0-3 million/year	7.5	2.1	4.4	5.9
\$3-8 million/year	7.1	4.5	2.5	4.5
\$8-15 million/year	3.9	4.7	4.8	6.8
\$15+ million/year	6.0	5.1	5.4	5.1
Direct-selling	6.0	2.3	3.0	6.0
Indirect-selling	6.4	5.2	4.4	4.7

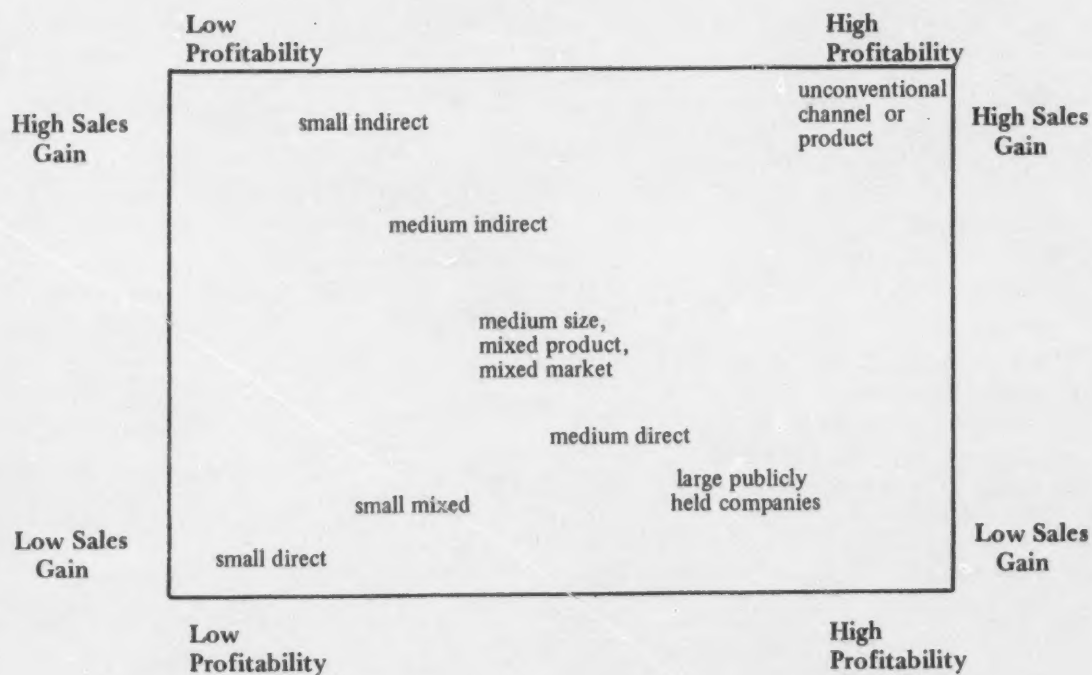
1982 RETURN ON INVESTMENT BY QUARTER
operating income as a percentage of gross investment

Category:	Quarter:			
	I	II	III	IV
All	9.9	6.5	7.6	8.2
\$0-3 million/year	12.7	0.9	9.0	10.4
\$3-8 million/year	10.4	6.4	5.2	5.4
\$8-15 million/year	5.3	8.7	6.9	7.1
\$15+ million/year	10.4	6.5	9.4	10.4
Direct-selling	9.0	4.8	5.7	8.4
Indirect-selling	10.1	8.1	7.8	6.4

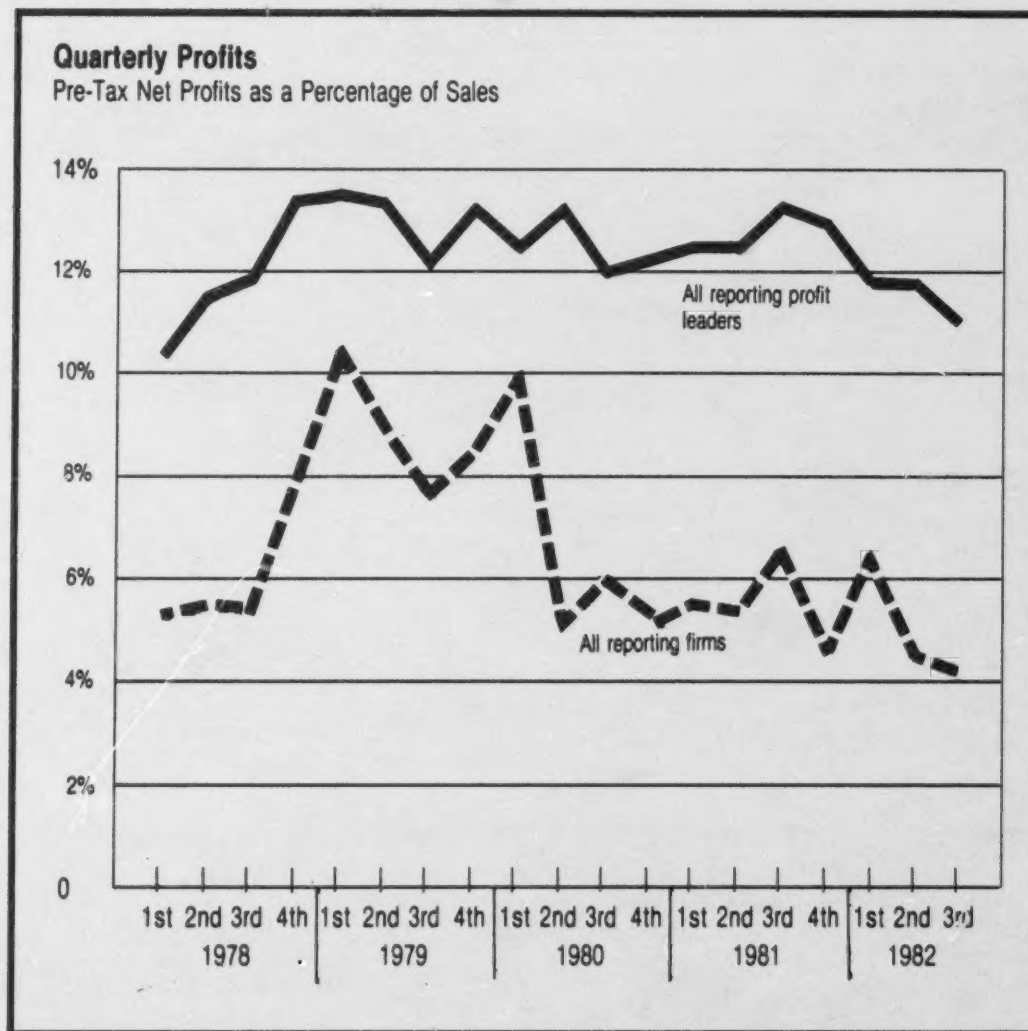
The astute reader will observe from these tables that even in a year as difficult as 1982, the industry's return on investment was always healthier than its return on sales. While sales in the forms industry - as in most printing-related business - often seem to return a low profit compared with many other manufacturing industries, the fact is that this profit is returned on a comparatively low gross investment. The so-called "high-tech" industries, for example, may generate handsome profits on actual sales, but enormous investments are required to develop their products.

In fact, the evidence strongly suggests the matrix for sales and profitability that is presented below. *It is intended that this matrix be applied to 1982 results only; it is not being put forward as a general theory.*

1982 SALES GAIN & PROFITABILITY MAP



QUARTERLY OPERATING PROFITS
as a percentage of total sales
(Source: IBFI Quarterly Business Conditions Survey)



This graph shows movements in profits over the past several years, putting the matter into a more objective light inasmuch as 1981 was a year of weak profits. It is noteworthy as a measure of the weakness of the 1982 forms market that even the industry profit leaders slipped badly.

The IBFI Forecast

It is well known that the major components of forms demand are economic activity and the use of computer printers. In the case of both factors, the main arguments have centered around, firstly, the time lags, and secondly, the correlation between the various sales of change. In fact, the quarterly forms sales data are probably not precise enough to provide definitive answers to either of these questions. Furthermore, dramatic changes in the U.S. financial system and interest rate policies have cheapened many forecasting models developed before 1979, because they rely upon historical trends whose underpinnings may well have been removed. Finally, the business downturn from which the economy seems to be emerging (albeit tentatively) has many unique features compared with other post-World-War-II business cycles. One need only recall 1982 to realize the problems this uniqueness creates for forecasters.

Nonetheless, there is increasing evidence that the economy has bottomed out. Meanwhile, sales of computers and printers have continued at a remarkable pace. This forecast will look at the economy and the computer market, then estimate the size of negative trends, winding up with a forms forecast.

The Economy

In terms of the economy, I cannot be as optimistic as are many other forecasters. To say with some confidence that there will be an economic improvement in 1983 is one thing; the matter of its likely strength is quite another. I contend that this recovery will be weaker than most in its early stages, and that whether or not it gains strength and momentum depends upon interest rates — and therefore upon both inflation levels and federal policy. This conservative view is the result of a realistic assessment of the potential sources of higher demand, for after all, demand is where all our economic growth must originate.

All the pundits say this recovery will be consumer-led. Yet many consumers are in the process of rebuilding cash positions that were drained by years of high inflation and low personal-savings interest rates. In fact, the high interest rates being paid on personal savings today are as large an obstacle to increased consumption as are the high rates being asked for consumer loans. Stubbornly high unemployment rates and workers' concern over job security will be additional brakes on consumer spending. *So the near-term increase in consumer demand will be modest.* Even in the longer term, businessmen and policy-makers must realize that personal savings will be a greater percentage of personal income and consumption a lower percentage due, of course, to the dramatically higher real earnings on those personal savings.

Businesses, unfortunately, have even less reason than consumers to increase demand. With serious overcapacity in almost every sector of the U.S. manufacturing community, 1983 will be a competitive and low-profitability operating environment for most businesses. Under such conditions, capital spending will not increase much if at all. *Even in the comparatively healthy industries such as business forms, it will take at least twelve months for any increase in economic activity to create a need for new capital investment.*

On top of the overcapacity problem, many businesses will have to delay desired capital spending in order to rebuild weakened financial positions. Additionally, the "real" cost of borrowed capital is still high at a time when, paradoxically, nominal interest rates are finally moderating. A little mental arithmetic can resolve this paradox. When the medium-term outlook for annual inflation is in the 3 - 4 % range, 10% money is very nearly as expensive as was a 20% rate with 13% annual inflation.

Finally, business decision-makers share with consumers a confidence problem regarding new expenditures. The consumer must balance the utility of a desired purchase against the possibility of losing his job after running down cash reserves. For businessmen the decision is even more difficult. On the one hand, they have a lot of reason to be leery of the recent optimistic forecasts, for unfortunately we all spent the last year and more going around on that particular merry-go-round. On the other hand, while consumers have nothing but a bit of self-gratification to lose by delaying a purchase, the businesses that guess correctly on expansion plans will be a leg up on competitors who waited on the sidelines until genuine recovery was there for all to see.

So what are we left with in the way of new demand? The fact is that a lot of what upturn there is this year will come from the so-called Reagonomics in the form of plain old-fashioned deficit spending by the federal government. Yes, once we wade through the jargon and the partisan statements of the various politicians and interest groups, there is little difference between Reagan's current policy and the classical Keynesianism against which he ran. Namely, the present administration is achieving its deficit spending through person-tax-rate cuts while Keynesians would have increased spending. That difference is important, but the net effect is much the same.

This deficit will not send interest rates up again. Given the dramatic changes we have already seen in personal savings and the depressed state of capital investment by businesses, federal spending will be propping interest rates up in the 7 - 9 % range rather than driving them above current levels. *And remember that we are talking about a money market which can generate \$217 billions in flow in a five-week period* (that is the amount of funds that moved into insured money-market funds in the first five weeks of 1983). Also, the deficit as now projected can shrink dramatically once an upturn actually is under way. So the real worry here is that due to poor timing the federal deficit could act to crowd out more desirable personal and business consumption.

In summary, for 1984 and beyond we can only hope that business and personal confidence returns to our marketplace. But remember in your planning that it will return only if given good reason to do so. Taking this analysis into account, the IBFI forms forecast is built around the following economic forecast:

	Real Change Over Same Quarter Previous Year	Annualized GDP \$ 1982 Billion
1983, I Quarter	+4.3%	3,000
II Quarter	+3.7%	3,020
III Quarter	+5.0%	3,104
IV Quarter	+6.2%	3,156
1984, I Quarter	+6.7%	3,200

Year	Real Change Over Previous Year	Real GDP 1972 Dollars
1983	+4.8%	1,551.0
1984	+6.0%	1,644.1
1985	+3.5%	1,701.6
1986	+1.7%	1,730.6
1987	+0.5%	1,739.3

NOTE: IBFI does not use the usual measure of economic activity in tracking the performance of the economy versus forms. These rates of change, which are in most cases rather higher than the rates being publicly forecasted and discussed, are based on non-farm private-sector spending and investment.

Computers and Business Forms

Of course, there is a lot more cause for optimism when we turn our attention away from the economy and toward the growing field populations of computers and their related printers. According to International Data Corporation of Waltham, Massachusetts, a recognized authority in the field, there will be an enormous increase in the number of computers over the coming years. It is of particular interest to note that in looking at past IDC forecasts, they have often proven to be conservative. For example, the IDC forecast for 1982 sales of desktop computers was on the low side by a factor of more than a third.

U.S. COMPUTER FIELD POPULATION FORECAST

Source: International Data Corporation

Year	Desktop Computers	Minicomputers	Small Business Computers	Mainframe Computers	Value of Installed Base
1982	2,384,000	571,700	212,900	56,400	100.0
1983	4,322,000	651,200	258,300	59,000	116.5
1984	7,116,000	747,600	309,200	62,300	136.5
1985	10,579,000	869,200	365,800	65,900	162.0
1986	14,661,000	1,019,000	428,400	68,900	189.8

Note: The value of the installed base is presented in billions of dollars. It consists of the value of the equipment in the year of purchase minus the value of retired equipment; thus, no allowance has been made for inflation or depreciation.

For forms manufacturers, these numbers are good news indeed. However, we should not become too euphoric, for there are a number of factors that will cause actual new demand for computer output forms to be considerably lower than a straight-line projection would suggest - though still, I hasten to add, quite substantial indeed. First of all, a series of studies from various sources covering the years from 1976 to 1982 demonstrates clearly that *as the computer population increases, the consumption of forms per machine has declined on a unit basis*. Of course, given the almost fantastic compound growth rates of the computer population, this declining consumption per machine still leaves plenty of real growth in forms consumption.

Secondly, a great deal of the potential growth in demand from general-purpose mainframe sites will be eaten away by computer output microfiche usage, loss of value added through substitution of one-part blank stock forms for custom forms, and, to a lesser extent, substitution of cut sheet for continuous forms.

Thirdly, as the prices of computer hardware continue to fall, a greater and greater percentage of new computer sales will be to non-business users. Many of these users will use no continuous forms at all, and the remainder are unlikely to contribute much to total forms demand.

Finally, movements in the economy do indeed affect total continuous forms demand even if they seem to have little impact upon sales of computers and printers.

In summary, a straight-line projection would show total continuous forms demand nearly doubling by the end of 1986 if one were to rely solely upon growth in the computer population. By comparison, the same straight-line projection would have forecast another near doubling of continuous forms output from 1978 through 1982 - but historical reality tells us in unequivocal language that the actual real growth was "only" 36.5%.

The first table below summarizes the effects of ongoing loss of value added, switches to non-forms technologies, and lower forms output per computer, applying all these factors to the growth in computer populations. The second table takes the results from the first table and factors in the forecasted economic effects on the technical potential demand increases. The end result is the IBFI forecast for continuous forms demand through 1986.

POTENTIAL CONTINUOUS FORMS DEMAND, 1982-1986

all data in millions of 1982 dollars

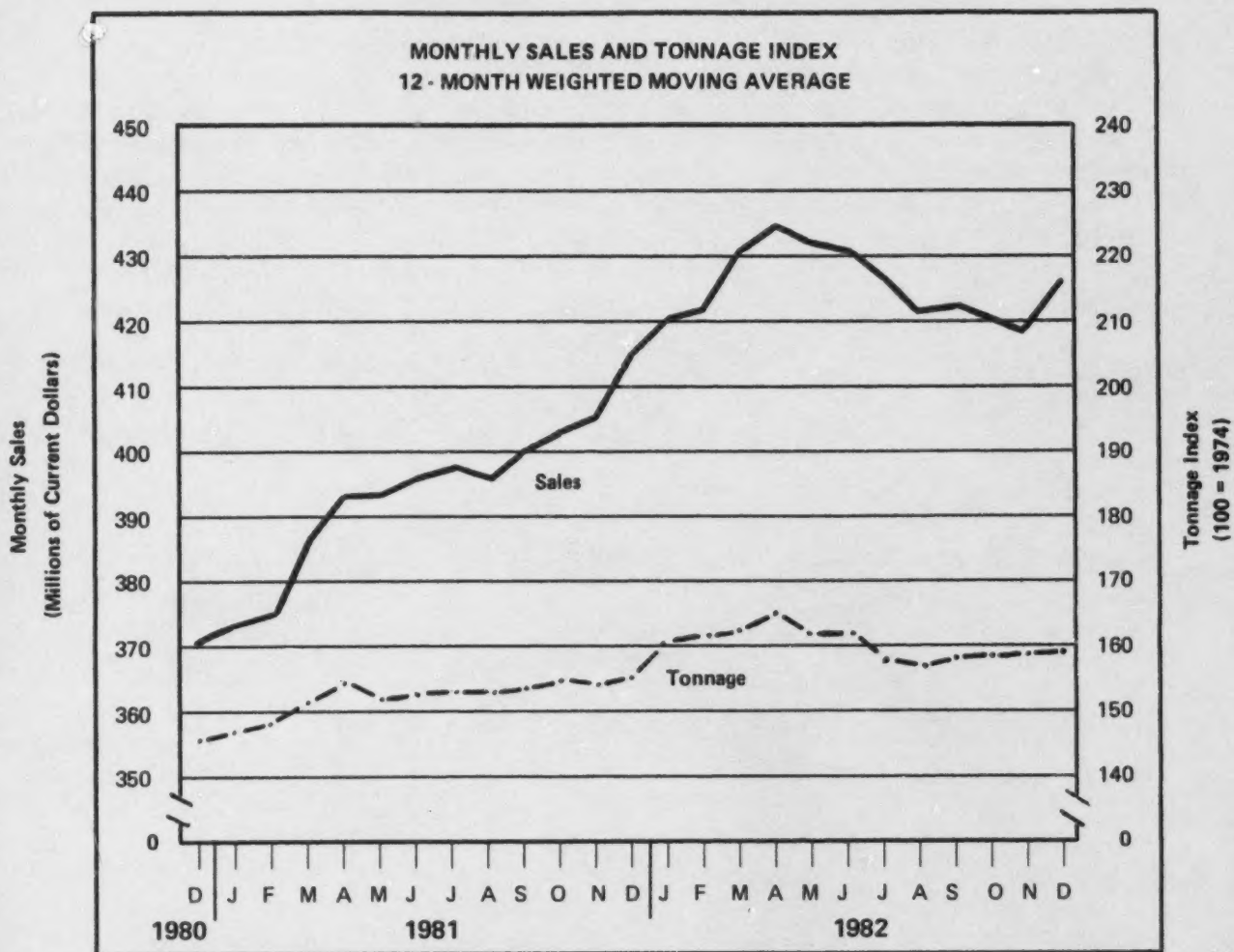
	1982	1983	1984	1985	1986
Desktops	62	89	111	131	155
Minicomputers	620	673	723	793	876
Small Business Computers	1,180	1,314	1,455	1,592	1,725
General Purpose	1,250	1,260	1,290	1,323	1,342
TOTAL	3,112	3,336	3,579	3,829	4,098
Dollar Increase	—	221	243	260	259

Note: Distributed data processing is included in the general purpose category.

ECONOMIC IMPACT ON NEW FORMS DEMAND

all data in millions of 1982 dollars

	"Natural" Increase	Economic Effect	Net New Demand	Total Demand Continuous Forms
1983	+221	-73	+148	3,263
1984	+243	+34	+277	3,540
1985	+260	+41	+301	3,841
1986	+259	-57	+202	4,043



These moving averages are reproduced from IBFI's *Confidential Monthly Sales Index*. They serve as an appropriate accompaniment to the near-term forms forecast.

Business Forms Forecast

The three tables below present the IBFI forecast for all forms broken down by major product for the years 1983 through 1986. The data for continuous forms is derived from the material presented on the previous page, plus allowing for the differing behavior of stock and custom types. The data for unit sets is a projection of the historical correlation between unit sets and the gross output of the private sector of the economy. The data for salesbooks and pegboard is a crude estimate of the net effects of the slowly declining salesbook market and the much more buoyant pegboard market. *All three tables use millions of 1982 dollars and are therefore "real"-growth projections.* To arrive at current-dollar values, the reader should add his own inflation estimates (remembering to compound such increases). To arrive at retail sales values, the reader should increase continuous custom by approximately 7.8%, continuous stock by approximately 2.8%, unit sets by approximately 12.3%, and salesbooks and pegboard by about 26.5% (these increases do *not* require compounding).

SHORT-TERM BUSINESS FORMS FORECAST

Year	Quarter	Continuous Custom	Continuous Stock	Unit Sets	Salesbooks, Pegboard	TOTAL
1983	I	484	292	325	52	1,153
	II	501	319	355	44	1,219
	III	486	314	360	45	1,205
	IV	519	348	373	49	1,289
1984	I	520	355	370	55	1,300

IBFI BUSINESS FORMS FORECAST, 1983-1986

All Data in Millions of 1982 Dollars

	1983	1984	1985	1986
Custom Continuous	1,990	2,135	2,308	2,411
Stock Continuous	1,273	1,405	1,534	1,643
Unit Sets	1,413	1,490	1,551	1,585
Salesbooks, Pegboard	190	200	205	205
TOTAL	4,866	5,230	5,598	5,844

IBFI FORECAST, 1983-1986

Real Percent Change By Product Over Previous Year

	1983	1984	1985	1986
Continuous Custom	5.5%	7.2%	8.1%	6.2%
Stock Continuous	3.6%	10.4%	9.1%	7.1%
Unit Sets	1.7%	5.4%	4.1%	2.2%
Salesbooks, Pegboard	3.3%	5.3%	2.5%	0.0%
TOTAL	3.8%	7.5%	7.0%	4.4%

This forecast suggests that although stock continuous forms will remain the industry growth leader over the next few years, their rate of increase will be slowing down. Continuous custom and unit set forms will perform closer to their historical trend than in most recent years. Pegboard sales will be strong enough to produce some real growth within their major product category despite the decline of salesbooks.

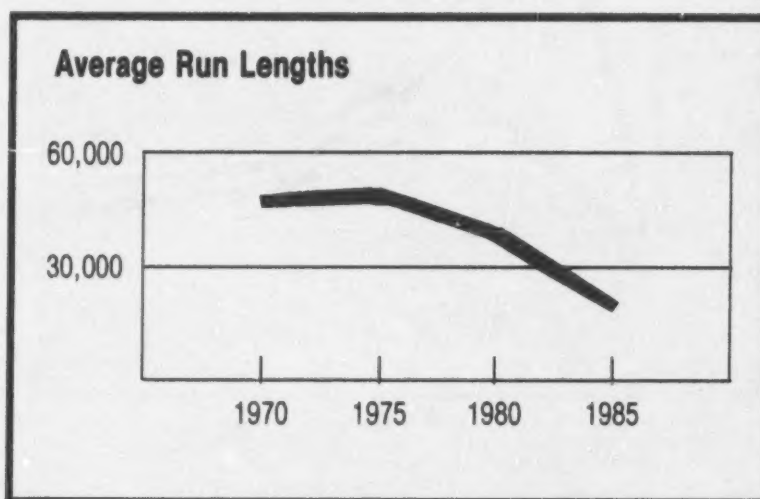
The forecast does not go beyond 1986 because neither the economic projections nor the computer industry projections upon which the forms forecast ultimately rests go beyond that year. Those who regularly prepare plans going out five or more years into the future will be well aware of the near-futility of assigning specific sales numbers to time periods that far in the future. However, for those who use this report to prepare such far-seeing plans, the following is suggested: in a good year the forms industry should achieve real growth of 7-8½%; in a mediocre year, 3-5%; in a weak year, 0-2%. Readers constructing five-year-and-beyond forecasts are invited to make their own assessment of economic circumstances in 1987-90 and then apply the appropriate growth rate. In terms of product differentials, unit sets are the slowest-growing product, and are also the only forms product to show unit declines in weak years. Stock will, on average, continue to outpace growth rates of custom continuous products. However, it is also more sensitive to economic conditions, and potentially more vulnerable to less-forms and anti-forms technologies.

Forms Trends: Average Order Sizes

The reader may or may not agree with the precise numbers that my research has assigned to the creation of future forms demand by the growing population of smaller computers. However, no forms manufacturer would deny that increasing use of small computers is impacting the forms marketplace. Furthermore, with a current market penetration of only five to seven percent (as estimated by A.D. Little, Inc., in a recent study), these machines are going to impact our market even more dramatically in the coming years. What is the impact going to mean? What will we find once we get inside the sheer dollar amounts of forms purchases — both at present — and more especially in the near future — by these smaller users?

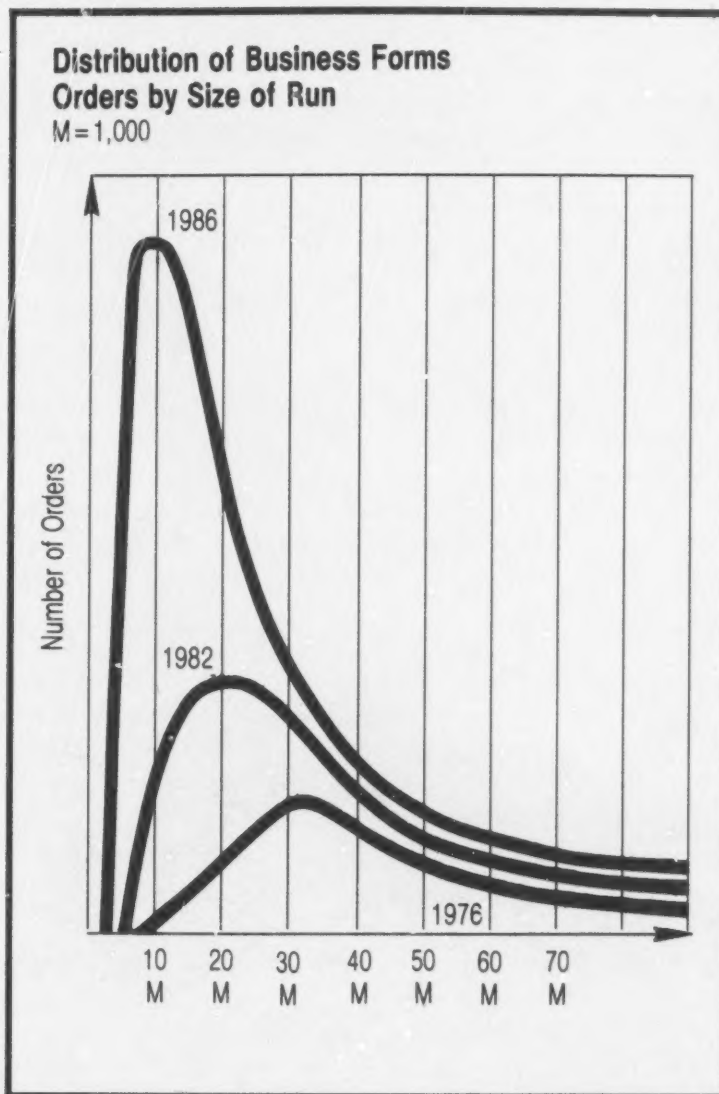
Certainly, average order sizes are dropping and will continue to do so. Extrapolating the current evidence suggests that in the next five years the total of orders placed with business forms manufacturers will double, although real growth will be more on the order of 30%. The fastest growth in orders of all types of forms will be in the ten-thousand-impression-and-under area, and probably toward the low end of that range. Furthermore, these smaller users will order their smaller lots about 2½ times as frequently as larger customers. As they become more familiar with the world of forms — an education which will take much longer than with larger customers both because of the smaller number of forms processed and the lower levels of attention that can be directed at them by sales departments — custom forms usage will increase. Nonetheless, stock forms will remain the bread-and-butter of this end of the market.

The graph below shows the impact of these changes upon average custom continuous run lengths.



SOURCE: The information in this section is based on IBFI estimates and surveys combined with research by A. D. Little, Inc.

This graph shows the effect of a changing customer base upon numbers and sizes of orders.



These two tables attempt to quantify the preceding graphs more precisely.

CONTINUOUS CUSTOM FORMS 1976-1986
Percentage of Orders by Order Size

Number of Impressions	1976	1982	1986
0-10,000	2.7	13.6	33.6
10-25,000	24.3	32.4	29.4
25-50,000	46.9	33.5	23.4
50-75,000	19.2	15.0	10.0
75,000 and over	6.9	5.5	3.6
TOTAL	100.0	100.0	100.0

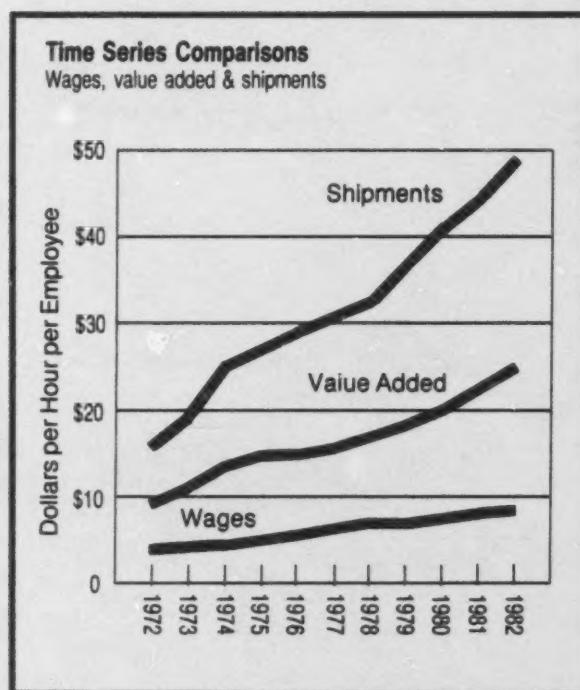
CONTINUOUS CUSTOM FORMS 1976-1986
Dollar Value of Shipments by Order Size

Number of Impressions	1976	1982	1986
0-10,000	4.3	60	221
10-25,000	95.7	299	455
25-50,000	443.3	741	851
50-75,000	283.6	518	584
75,000 and over	143.4	268	300
TOTAL	970.3	1,886	2,411

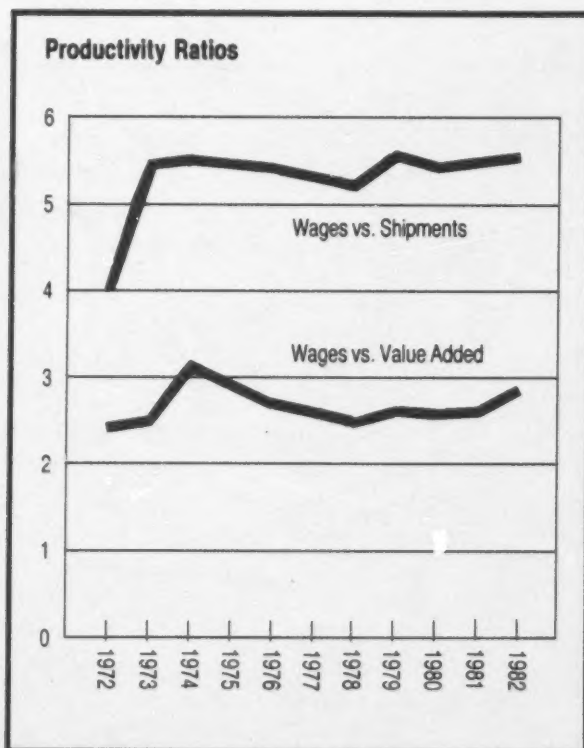
Forms Trends: Productivity

This section presents some new data collected on our industry's employment levels and productivity. This subject has already received attention in previous editions of *Perspective*; here, it is pursued in somewhat more detail.

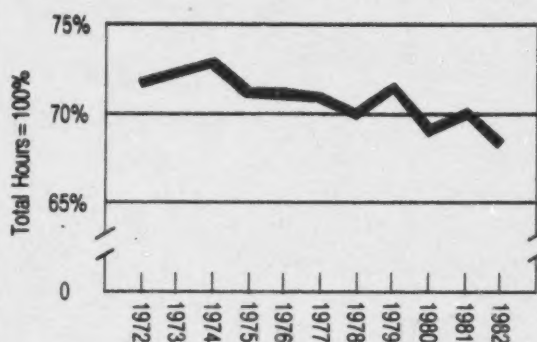
Shown below is a time series showing movements in wages, value added and shipments over the last ten years, all presented in terms of current dollars per hour per employee. Over the period as a whole, we have been spared much of the productivity slowdown that has so plagued American industry as a whole. While wages have nearly doubled from a national average in the forms industry of \$4.14 to the present \$8.24 an hour, value added per employee hour has risen by 2½ times, from about \$10 to nearly \$25; and shipments have tripled, rising from \$16 per employee hour ten years ago to \$49 today.



Of course, ten years is a long time in human affairs, and our industry's productivity is no exception. If we take the same data presented in the previous graph and convert it into productivity ratios (in this case, wages versus shipments and wages versus value added), we can see that this basically favorable trend has had its ups and downs. Much of that already dramatic productivity improvement occurred at the beginning of the decade in question, and was followed by a more gradual slide. This slide was arrested only in 1978, and has shown gradual improvement since.



Hours Worked
Production Hours vs. Total Hours



One cause of these productivity improvements is, of course, the steadily increasing raw material content of each dollar's worth of forms shipped. Another cause, documented in the graph to the left, is a decline in production hours as a percentage of the total hours worked. Do not jump to the conclusion that this trend is a negative one. It reflects in part the natural maturing of the forms industry; but more strongly, it shows the industry's increasing efforts to fight lower value added and a trend toward commodity status by putting more and more effort into sales and sales services.

Of course, all this data on employment in our industry can be dramatically different from one plant to another. The table below presents an industry profile that identifies some of the sources of such differences. Of the 820 plants that produce business forms in significant amounts, over 100 produce them only as a minor product; that is, the sale of forms from such plants accounts for less than half their total production by dollar value. The bulk of the remaining plants specialize in a particular product category, and that choice of product is an important determinant of their labor productivity.

U.S. Forms Industry Profile

Where do you fit?

Product	Plants	Production Employees	Shipments	Average		
				Production Employee Per Plant	Sales Per Plant	Shipments Per Production Employee
Sets	282	16,600	1,601	59	5.7	96,446
Custom	121	13,142	1,604	109	13.3	122,443
Stock	73	6,018	1,280	82	17.5	212,695
Manifold	25	1,800	183	72	7.3	101,667
Mixed	204	3,340	227	16	1.1	67,964

Trends In Paper Capacity

To a casual observer, the paper industry has enjoyed remarkably steady, though rarely dramatic, growth since its earliest days of mechanically automated production. Much like the forms industry, but spread over many more decades, the paper industry has seen successive new demands come along as older ones lose their vitality. The result has been a ratio of paper and paperboard production to GNP that, except in deep recession, has fallen much more gradually than GNP has risen, and thus a growth whose steadiness promised a long future even if not a brilliant one.

In recent years, however, the industry has, again like forms, been experiencing considerable changes in its internal structure the depths of which have been hidden by continued growth. Between a world-wide squeeze on raw materials, public demands for large investments in environmental protection systems, and on-going rises in wages, the industry has been shedding itself of large numbers of small, less automated and inadequately integrated machines and mills; from 1970 through 1982, for example, 120 machines and 20 entire mills were permanently shut down in the printing and writing grades alone, while a relative handful of replacement machines were sufficient to increase capacity by over 50%.

While these large production units make perfect sense in terms of current political and market conditions, they require awesome capital investment and very substantial lead times. These lead times make the exact timing of a large machine's "debut" in the marketplace a sophisticated guessing game. From the paper industry's point of view, this is a problem that simply comes with the territory. Their planning is concerned, roughly speaking, with a market lasting from the fifth to 25th years of the plan; a year here or there is of little significance. From the viewpoint of converters, however, paper supply has become an even more volatile and bewildering switch from overcapacity to undercapacity and back again.

Fortunately for business forms manufacturers and other major intermediate users of paper — though unfortunately for papermakers — there is little likelihood of undercapacity in uncoated free sheet, the principal raw material for business forms. The tables below summarize projected ranges in papermaking capacity utilization rates.

The source for the data on total capacity for the manufacture of uncoated free sheet is *Paper, Paperboard, and Wood Pulp Capacity*, an annual publicly available publication of the American Paper Institute (API). The source for the base year shipments of uncoated free sheet is another API publication, *Statistics of Paper, Paperboard and Wood Pulp 1982*. The method used was to calculate the correlation between growth in demand for tons of uncoated free sheet and real growth in gross domestic product (GDP). The resulting margin of error is approximately plus or minus one percentage point of capacity utilization.

Year	Capacity	U.S. Uncoated Free Sheet Demand		
		Pessimistic	Expected	Optimistic
1982	9,017	N/A	7,869	N/A
1983	9,123	8,341	8,380	8,396
1984	9,532	8,925	9,009	9,043
1985	9,900	9,264	9,378	9,423
1986	10,250	9,440	9,566	9,620

NOTE: All data in thousands of tons.

In the table above, the "pessimistic" demand projection assumes the lowest ratio of economic growth to free sheet growth that can be supported by historical data over the previous 12 years. The "optimistic" projection assumes the highest ratio, and the "expected" projection uses the 12-year average. Obviously, in some years the demand growth will be higher than expected and in others lower, rather than following the exact same pattern each year. However, this tendency increases the likelihood that demand will be close to the "expected" growth rates.

In the table below, this data is converted to capacity operating rates.

U.S. UNCOATED FREE SHEET CAPACITY UTILIZATION RATES

Year	Pessimistic	Expected	Optimistic
1982	N/A	87.3%	N/A
1983	91.4%	91.9%	92.0%
1984	93.6%	94.5%	94.9%
1985	93.6%	94.7%	95.2%
1986	92.1%	93.3%	93.9%

The API estimates attempt to be actual, not theoretical, capacity rates. In fact, in some years of very high demand, the paper industry has actually exceeded its rated production capacity. With 93-95% rates a "comfortable" area for papermakers, and only 96% and above truly "tight", these projections suggest a firming of paper prices throughout 1984, with a little friction possible in 1985. There is, however, little chance of allocations or other symptoms of a really tight paper market during the next few years.

These tables amply demonstrate the figurative knife-edge on which planners in the paper industry must balance. Had the economic upturn begun 18 months ago, as hoped, or a year ago, as expected, capacity would be unchanged but demand for each of the years from 1982 on would have increased significantly. The compounding of this increase would have led to a firm market by the middle of this year and a tight one in 1984, versus the current reality of rather unsatisfactory operating rates throughout the forecast period.

Some forms manufacturers may find the paper demand projections somewhat conservative. The fact is, if all categories of uncoated free sheet were growing at the long-term rate at which forms papers are growing, the paper industry couldn't build new machines fast enough to satisfy the demand. A very high percentage of new demand in the uncoated free sheet category is provided by forms bond (about one-third of the new demand), bond and writing (about 30%), and offset papers (about 10%). The tables below estimate current forms industry raw materials requirements and how they are divided between the major forms products.

1982 PAPER INDUSTRY INPUTS

To Forms Manufacturers

data in tons

Forms Bond	1,650,000
Other Uncoated Free Sheet	460,000
Uncoated Groundwood	300,000
Other	60,000
TOTAL	2,470,000

Source: Estimates based on IBFI survey data and most recent published API data.

*Notes: Includes 100,000+ tons of bond and groundwood imported from Canada.
Other freesheet is mostly carbonless and OTC base stock, but also some offset.
Other is mostly ledger and other heavy papers.*

TONNAGE OF RAW MATERIALS BY MAJOR PRODUCT

Source: IBFI estimate

	1982	1986
Custom Continuous	977,000	1,268,000
Stock Continuous	919,000	1,243,000
Unit Sets	528,000	589,000
Salesbooks, Pegboard	46,000	51,000
TOTAL	2,470,000	3,151,000

These estimates assume that tonnage will continue to grow at a rate fractionally greater than growth in constant-dollar sales due to the ongoing erosion of value added. The reader is warned that this table presents a simplistic view of a very complex subject. Trends in forms sizes, average numbers of parts, and average basis weights all affect the total tonnage of paper products handled by the forms industry. It should be noted that this table assumes that groundwood papers consumed by the forms industry will continue to grow at a faster rate than free sheet, and that bond and groundwood together will grow faster than carbonless and one-time-carbonizing taken together.

Appendix

Selected Historical Industry Statistics

APPENDIX A.

Sales Data, Manifold Business Forms

(Millions of Dollars at Shipment Values)

	Unit Sets	Custom Continuous	Stock Continuous	Sales And Other Books	TOTAL
1958	159.6	150.4	18.8	45.2	374.0
1963	265.5	239.4	53.9	39.6	598.4
1967	361.7	391.9	98.0	44.2	895.8
1970	468.4	493.4	185.0	52.3	1,199.1
1971	486.4	518.9	190.0	47.0	1,242.3
1972	547.3	578.2	204.9	51.5	1,381.9
1973	630.2	733.7	282.1	59.8	1,705.8
1974	776.2	966.1	432.2	78.8	2,253.3
1975	781.6	944.9	413.7	78.3	2,218.5
1976	849.1	970.3	521.1	84.8	2,425.3
1977	958.1	981.1	633.9	129.5	2,702.6
1978	1,065.1	1,194.8	680.3	137.9	3,078.1
1979	1,248.7	1,466.9	891.4	154.2	3,761.2
1980	1,323.1	1,657.9	1,031.7	174.1	4,186.8
1981	1,417.2	1,823.7	1,186.5	175.7	4,603.1

APPENDIX B.

Selected Data From Census Years

(Millions of Dollars at Shipment Values)

	Total Forms Manufactured	Of Which Manufactured By Forms Industry	Of Which Made By Other Industries	Non-Forms Made By Forms Industry	Total Industry Shipments
1958	374.0	357.0	17.0	35.3	392.3
1963	598.4	545.0	53.4	93.0	638.0
1967	895.8	809.2	86.6	123.1	932.3
1972	1,381.9	1,267.9	114.0	161.8	1,429.7
1977	2,702.6	2,559.4	143.2	334.6	2,894.0

APPENDIX C.

Growth of Forms Industry Employment

Source: US Census of Manufactures

	Total Number of Companies	Number of Plants	Plants With 20 or More Employees	Total Number of Employees
1958	*	*	168	23.5
1963	439	502	250	28.8
1967	454	542	295	34.6
1972	533	667	376	38.5
1977	604	795	477	45.3

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